# **VOLTAGE BAND (WINDOW)** 24-240V | VWKE SERIES



- Monitors AC single phase or DC voltages
- Provides voltage band (window) protection
- Wide range of user-adjustable Over Voltage and Under Voltage settings
- ◆ 15A SPDT output contacts
- Adjustable time delay on drop-out of 0.1 - 10 seconds
- LED indicates nominal voltage & output relay status
- Compact 17.5mm enclosure mounts on 35mm DIN rail



Provides protection to equipment that is required to operate within an upper and lower AC single phase or DC voltage limit. As long as the monitored voltage remains between the Over Voltage ( $U_{max}$ ) and Under Voltage ( $U_{min}$ ) settings, the internal relay stays energized. If the monitored voltage falls outside this range, the relay will drop-out. The  $U_{max}$  dial sets the upper trip setting per the Overvoltage range of the product. The  $U_{min}$  dial sets the lower trip setting at 30-95% of the upper setting. This product has an adjustable time delay on relay drop-out (t) of 0.1-10 seconds to prevent nuisance tripping.



Catalog Number	VWKE024D	VWKE120A	VWKE240A
Monitored Voltage (U)	24V DC	120V AC (50/60 Hz)	240V AC (50/60 Hz)
Over Voltage Range (Umax)	18-30V DC	80-150V AC (50/60 Hz)	160-276V AC (50/60 Hz)
Under Voltage Range (Umin)	30 - 95% of Over Voltage Setting		
Time Delay on Pick-up	Fixed 0.1 Seconds		
Time Delay on Drop-out (t)	Adjustable 0.1 - 10 Seconds		



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#### **APPLICATION DATA**

Catalog Number	VWKE024D	VWKE120A	VWKE240A		
Operating Characteristics					
Monitored Voltage (U)	24V DC	120V AC (50/60 Hz)	240V AC (50/60 Hz)		
Maximum Voltage	35V DC	200V AC (50/60 Hz)	280V AC (50/60 Hz)		
Over Voltage Range (Umax)	18-30V DC	80-150V AC (50/60 Hz)	160-276V AC (50/60 Hz)		
Under Voltage Range (Umin)	30 - 95% of Pick-up Setting				
Repeatability	<1%	<1%	<1%		
Hysteresis	2-6%	2-6%	2-6%		
Load (Burden)	1.7W	3VA	3VA		
Timing					
Time Delay on Pick-up	Fixed 0.1 Seconds				
Time Delay on Drop-out (t)	Adjustable 0.1-10 Seconds				
Output					
Rating	15A @ 240V AC B300				
Minimum Switching	100mA @ 5V AC or 5V DC				
Contact Material	Silver Alloy				
Life	10 million operations mechanical; 70,000 electrical				
Other					
Mounting	35mm DIN Rail only				
Agency Approval	(File #E466100)				
	Storage: -30° to 70° C (-22° to 158° F)				
Temperature	Operating: -20° to 55° C (-4° to 131° F)				
LED Indication	Green-Monitored Voltage Present Red-Relay Energized				
Terminations	14 AWG (2.5mm <sup>2</sup> )				

#### **CONNECTION DIAGRAMS**





### DIMENSIONS

